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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,787	08/01/2003	Tejas B. Desai	2003P04268US01; 60,426-61	5830
24500	7590	01/10/2005	EXAMINER	
SIEMENS CORPORATION INTELLECTUAL PROPERTY LAW DEPARTMENT 170 WOOD AVENUE SOUTH ISELIN, NJ 08830			TRIEU, VAN THANH	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/632,787

Applicant(s)

DESAI, TEJAS B.

Examiner

Van T Trieu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Juzswilk et al** [US 6,612,165] in view of **Honeck et al** [US 6,489,888].

Regarding claim 1, the claimed tire pressure monitoring system comprising:

a plurality of tires each including a tire pressure sensor operable to send a tire pressure signal including a code (each of the tires 14 having a pressure sensor 20 and a memory 30 for storing tire identification code, see Fig. 1, col. 3, lines 1-4 and 20-47); and the initiation member associated with each of the tires and the initiation member being operable to send an initiation signal respective tire pressure sensor to send a response signal, each of the initiators having a unique frequency of sending out the initiation signal (each of the LF transmitter antennas 44 transmits a LF signal to initiate the respective tire based unit 18 to be monitored, see Fig. 1, col. 3, lines 51-4, col. 4, lines 20-30 and col. 5, lines 6-52); but **Juzswilk et al** fails to disclose the control for receiving the response signals and identifying a particular location on a vehicle based upon a frequency of the response signals. However, **Juzswilk et al** teaches that after receiving LF initiation signal from the LF transmitter antenna 44, the tire based unit 18 generates

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an RF response signal to a vehicle based unit 16. The RF response signal includes a message packet having a tire identification code and its tire pressure information. The vehicle based unit 16 includes a controller 36 with memory 42 for storing information for associating the location of the tire based units 18 to locations of the vehicle 12. The memory 42 stores the identification information for comparing to determine whether the RF response signal received by the controller 36 originated at a tire based unit 18 associated with the vehicle 12. The received tire pressure information and tire location are displayed to vehicle's operator, see Figs. 1 and 2, col. 4, lines 12-45, col. 5, lines 6-47 and col. 7, lines 3-8. **Honeck et al** suggests that a system for identifying the position of a tire on a vehicle 12. The system comprises a monitor 22 to receive RF message signal strength from one or more tire sensors 24-30 with its identification data uniquely identifying the tire. The monitor 12 includes a processing circuit 38 to store the RF signal strengths provided by the RF signal strength circuit 36 in memory 40. Processing circuit 38 identifies the positions of the tires on vehicle 12 based on the RF signal strengths of the wireless messages. The frequency distribution patterns of the received RF signal strengths are compared to one or more predetermined frequency distribution patterns stored in the memory 40 and to determine the position of the tire on the vehicle 12 based on the comparison, see Figs. 1-4, col. 1, lines 65-67, col. 2, lines 1-20, col. 3, lines 22-53, col. 4, lines 31-67 and col. 5, lines 1-43. Therefore, it would have been obvious to one skill in the art at the time the invention was made to substitute the frequency distribution message signals of **Honeck et al** for the RF message packet response signals of **Juzswilk et al** since the message packet response signals are RF

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signals selected from each of the tires on the vehicle via the initiators, respectively.

Thus, using frequency distribution message signals will not change the operation functions of the vehicle tire monitoring system while provides a greater flexibility of determining location of each tires under monitored.

Regarding claim 2, all the claimed subject matters are discussed between **Juzswilk et al** and **Honeck et al** in respect to claim 1 above, such as the LF transmitter antenna 44, see Fig. 1.

Regarding claim 3, all the claimed subject matters are discussed between **Juzswilk et al** and **Honeck et al** in respect to claim 1 above, and including the tire pressure sensors periodically report on the tire pressure on an RF wavelength, see col. 6, lines 60-62

Regarding claim 4, all the claimed subject matters are discussed between **Juzswilk et al** and **Honeck et al** in respect to claim 1 above, and including the initiators have a unique time period for initiating a response localization signal (the LF initiation signals have a first time interval and a second time interval, see col. 5, lines 45-52).

Regarding claim 5, the method claimed limitations are met by the apparatus claim 1 as discussed between **Juzswilk et al** and **Honeck et al** in respect to claim 1 above.

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Regarding claim 6, all the claimed subject matters are discussed between **Juzswilk et al** and **Honeck et al** in respect to claim 5 above, and the tire codes is initially learned at a factory, which reads upon the identification codes for each of the tires being stored in the memory 30 previously at the factory, dealer or tire manufactory, see col. 3, lines 43-47); and the location of each of the frequencies is then learned based upon the reporting frequency of each of the learning codes (the memory 40 of **Honeck et al**, see col. 4, lines 31-67 and col. 5, lines 1-41).

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Meyer et al discloses a process for checking the air pressure in the tires of motor vehicle wheels comprising a plurality of initiators to emit long wave RF signal and the tire transmitters to transmit long wave RF response signal at different radio frequency from the initiators to the vehicle receiver for identifying the tire location and pressure data. [US 5,880,363]

Ghabra et al discloses a system for remote monitoring of vehicle tire pressure including a plurality of initiators to emit LF signal to each of the tire monitor. The tire monitor transmits RF signal to the vehicle receiver for identifying location of each tire with pressure information. [US 6,838,985]

Kaminski et al discloses a tire pressure monitoring system comprising a plurality of initiators for emitting LF signal to each tire. Each of the tire transmits RF signal in

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response to the received LF signal from the initiator, to the vehicle controller for identifying location and pressure information of each tire. [US 6,771,169] and [US 6,784,794]

3. Any inquiry concerning this communication or earlier communications from examiner should be directed to primary examiner **Van Trieu** whose telephone number is (571) 272-2972. The examiner can normally be reached on Mon-Fri from 7:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. **Jeffery Hofsass** can be reached on (571) 272-2981.

A handwritten signature in black ink, appearing to read 'Van Trieu', with a long horizontal flourish extending to the right.

Van Trieu
Primary Examiner
Date: 1/6/05